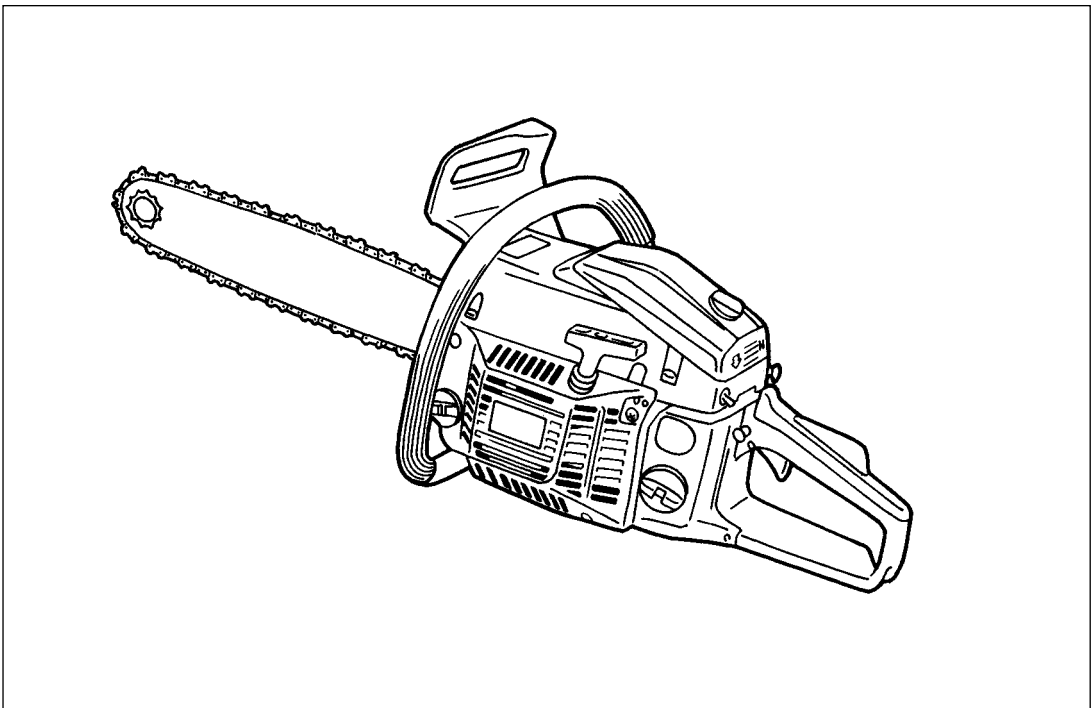




OWNER/OPERATOR MANUAL

CHAINSAWS

G455AVS



WARNING



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

IMPORTANT:

Before operating your RedMax product, read this manual carefully and completely.

Thank you for choosing our RedMax® chain saw.

This manual will provide you with full understanding of the necessary instructions for assembly, operation and maintenance of the equipment.

Please read it carefully before starting operation.

For continued safe and reliable operation, use ONLY original RedMax parts and accessories, Adhere to all notes and warnings.

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1. For Safe Operation

1. Never operate a chain saw when you are fatigued, ill, or upset, or under the influence of medication that may make you drowsy, or if you are under the influence of alcohol or drugs.
2. Use safety footwear, snug fitting clothing and eye, hearing and head protection devices.
3. Always use caution when handling fuel. Wipe up all spills and then move the chain saw at least ten(10) feet(three(3) m) from the fueling point before starting the engine.
 - 3a) Eliminate all sources of sparks or flame (ie. smoking, open flames, or work that can cause sparks) in the areas where fuel is mixed, poured, or stored.
 - 3b) Do not smoke while handling fuel or while operating the chain saw.
4. Do not allow other persons to be near the chain saw when starting the engine or cutting a wood. Keep bystanders and animals out of the work area. Children, pets, and bystanders should be a minimum of thirty(30) feet away when you start or operate the chain saw.
5. Never start cutting until you have a clear work area, secure footing, and planned retreat path from the falling tree.
6. Always hold the chain saw firmly with both hands when the engine is running. Use a firm grip with thumb and fingers encircling the chain saw handles.
7. Keep all parts of your body away from the saw chain when the engine is running.
8. Before you start the engine, make sure the saw chain is not contacting anything.
9. Always carry the chain saw with the engine stopped, the guide bar and saw chain to the rear, and the muffler away from your body.
10. Always inspect the chain saw before each use for worn, loose, or changed parts. Never operate a chain saw that is damaged, improperly adjusted, or is not completely and securely assembled. Be sure that the saw chain stops moving when the throttle control trigger is released.
11. All chain saw service, other than the items listed in the Operator's Manual, should be performed by competent chain saw service personnel. (e.g., if improper tools are used to remove the flywheel, or if an improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur which could subsequently cause the flywheel to disintegrate).
12. Always shut off the engine before setting it down.
13. Use extreme caution when cutting small size brush and saplings because slender material may catch the saw chain and be whipped toward you or pull you off balance.
14. When cutting a limb that is under tension, be alert for spring back so that you will not be struck when the tension in the wood fibers is released.
15. Keep the handles dry, clean and free of oil or fuel mixture.


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16. Operate the chain saw only in well ventilated areas. Never start or run the engine inside a closed room or building. Exhaust fumes contain dangerous carbon monoxide.
 17. Do not operate a chain saw in a tree unless specially trained to do so.
 18. Guard against kickback. Kickback is the upward motion of the guide bar which occurs when the saw chain at the nose of the guide bar contacts an object. Kickback can lead to dangerous loss of control of the chain saw.
 19. When transporting your chain saw, make sure the appropriate guide bar scabbard is in place.
 20. This chain saw is equipped with a spark arrester built-in muffler. Periodically check the arrester to keep it in good order.

KICKBACK SAFETY PRECAUTIONS FOR CHAIN SAW USERS

– WARNING –

- Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut. Tip contact in some cases may cause a lightning fast reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the saw which could result in serious personal injury.
- Do not rely exclusively on the safety devices built into your saw. As a chain saw user you should take several steps to keep cutting jobs free from accident or injury.
 - (1) With a basic understanding of kickback you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
 - (2) Keep a good grip on the saw with both hands, the right hand on the rear handle, and the left hand on the front handle, when the engine is running. Use a firm grip with thumbs and fingers encircling the chain saw handles. A firm grip will help you reduce kickback and maintain control of the saw. Don't let go.
 - (3) Make certain that the area in which you're cutting is free from obstructions. Do not let the nose of the guide bar contact a log, branch, or any other obstruction which could be hit while you are operating the saw.
 - (4) Cut at high engine speeds.
 - (5) Do not overreach or cut above shoulder height.
 - (6) Follow manufacturers sharpening and maintenance instructions for saw chain.
 - (7) Only use replacement bars and chains specified by the manufacturer or the equivalent.

2. Installing Guide Bar and Saw Chain

 The saw chain has very sharp edges. Use thick protective gloves for safety.

1. Loosen the nuts and remove the chain cover.
2. Install the attached spike to the power unit.
3. Gear the chain to the sprocket and, while fitting the saw chain around the guide bar, mount the guide bar to the power unit. Then adjust the position of chain tensioner nut on the chain cover to the lower hole of guide bar.

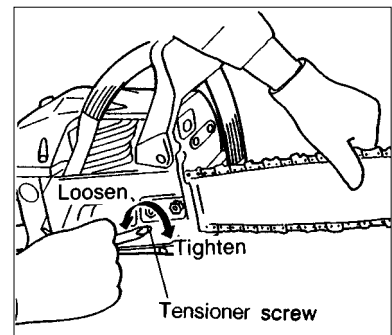
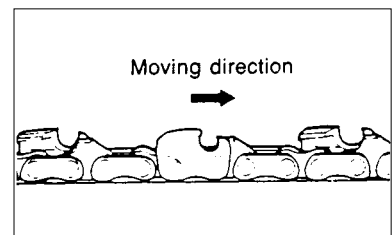
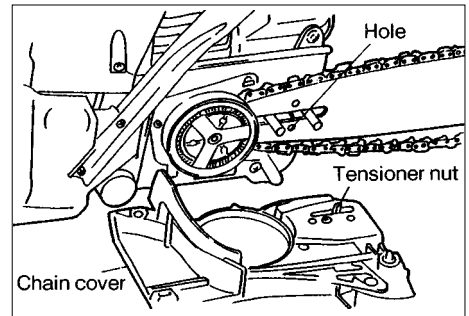
Note:

Pay attention to the correct direction of the saw chain.

4. Fit the chain cover to the power unit and fasten the nuts to finger tightness.
5. While holding up the tip of the bar, adjust the chain tension by turning the tensioner screw until the tie straps just touch the bottom side of the bar rail.
6. Tighten the nuts securely with the bar tip held up. Then check the chain for smooth rotation and proper tension while moving it by hand. If necessary, readjust with the chain cover loose.
7. Tighten the tensioner screw.

Note :

A new chain will expand its length in the beginning of use. Check and readjust the tension frequently as a loose chain can easily derail or cause rapid wear of itself and the guide bar.



3. Fuel and Chain oil

■ FUEL

The RedMax engines are lubricated by oil specially formulated for air-cooled 2-cycle gasoline engine use. If RedMax oil is not available, use an anti-oxidant added quality oil expressly labeled for air-cooled 2-cycle engine use.

RECOMMENDED MIXING RATIO GASOLINE 32 : OIL 1

Exhaust emission are controlled by the fundamental engine parameters and components (eq., carburation, ignition timing and port timing) without addition of any major hardware or the introduction of an inert material during combustion. These engines are certified to operate on un-leaded gasoline.

WARNING !

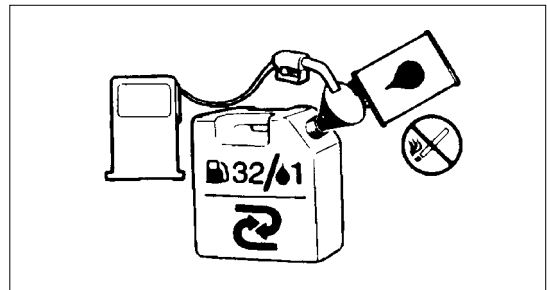
The fuel is highly flammable. Do not smoke or bring any flame or sparks near fuel.

• HOW TO MIX FUEL

1. Measure out the quantities of gasoline and oil to be mixed.
2. Put some of the gasoline into a clean, approved fuel container.
3. Pour in all of the oil and agitate well.
4. Pour in the rest of gasoline and agitate again for at least one minute.
5. Put a clear indication on the outside of the container to avoid mixing up with gasoline or other containers.

FOR YOUR ENGINE LIFE, AVOID;

1. FUEL WITH NO OIL(RAW GASOLINE) – It will cause severe damage to the engine inner parts very quickly.
2. GASOHOL – It can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
3. OIL FOR 4-CYCLE ENGINE USE or WATER COOLED 2-CYCLE ENGINE USE – It can cause spark plug fouling, exhaust port blocking, or piston ring sticking.

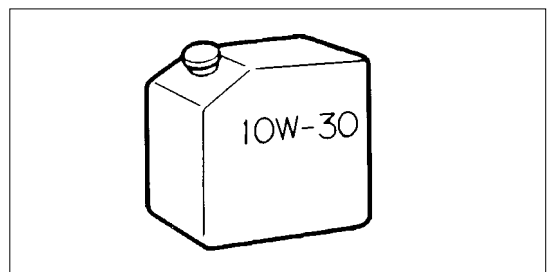


■ CHAIN OIL

Use motor oil SAE 10W-30 all year round, or SAE 30-40 in summer and SAE 20 in winter.

NOTE:

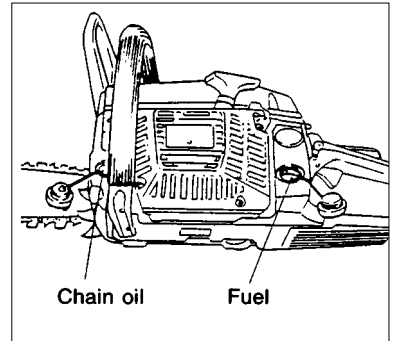
Do not use waste or regenerated oil that can cause damage to the oil pump.



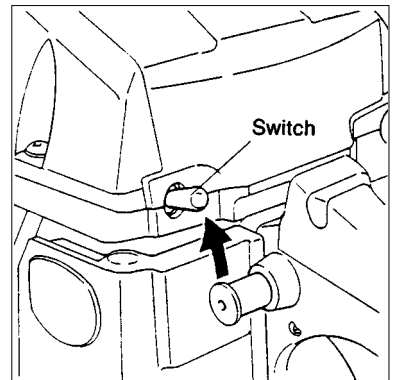
4. Operating Engine

Starting engine

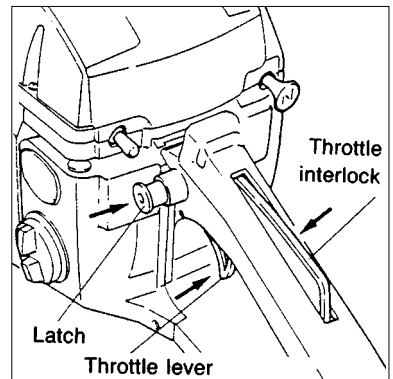
1. Fill fuel and chain oil tanks respectively, and tighten the caps securely.



2. Tilt the switch lever upward.



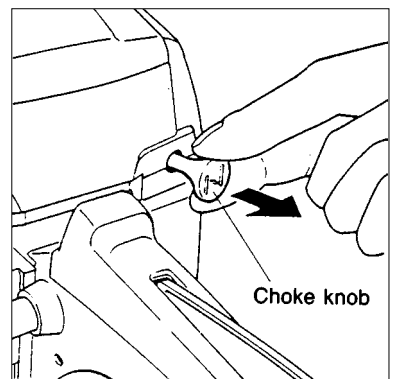
3. While holding the throttle lever together with the throttle interlock, push in the side latch and release the throttle lever to hold it at the starting position.



4. Pull out the choke knob to the closed position.

Note:

When restarting immediately after stopping the engine, leave the choke knob at the open position.



5. While holding the saw unit securely on the ground, pull the starter rope vigorously.

! Do not start the engine while hanging the chain saw with a hand. The saw chain may touch your body. It's very dangerous.

6. When engine has ignited first, push in the choke knob and pull the starter again to start the engine.

7. Allow the engine to warm up with the throttle lever pulled slightly.

! Keep clear of the saw chain as it will start rotating upon starting of engine.

Checking oil supply

After starting the engine, run the chain at medium speed and see if chain oil is scattered off as shown in the figure.

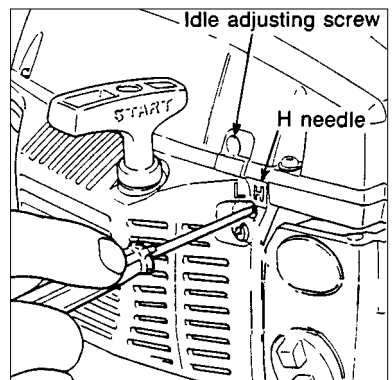
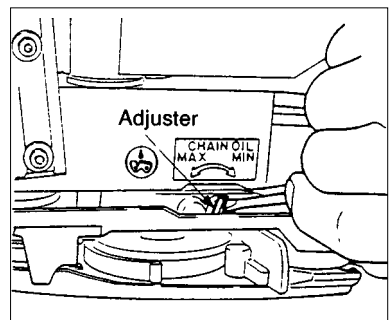
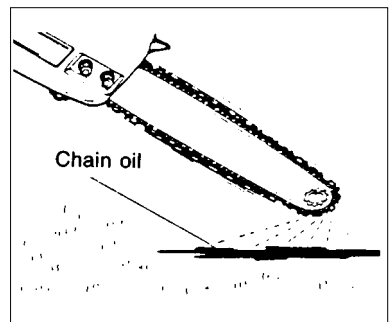
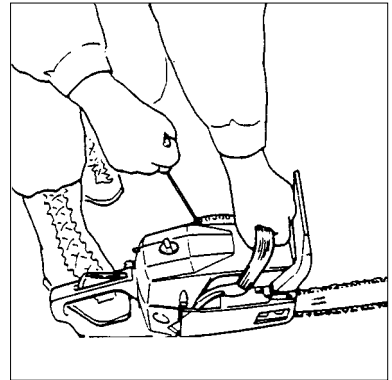
The chain oil flow can be changed by inserting a screwdriver in the hole on bottom of the clutch side. Adjust according to your work conditions.

Note:
The oil tank should become nearly empty by the time fuel is used up. Be sure to refill the oil tank every time when refueling the saw.

Adjusting carburetor

The carburetor has been adjusted at the factory. Should your unit need readjustment due to the changes in altitude or operating conditions, please let your skillful dealer make the adjustment. A wrong adjustment may cause damage to your unit. If you have to make the adjustment yourself, please carefully follow the procedure below.

Note :
Be sure to adjust the carburetor with the bar chain attached.



1. H and L needles are restricted within the number of turn as shown below, because this engine conforms to 1995 California regulations for utility and lawn and garden equipment engines as applicable.

H needle: $\frac{1}{4}$
L needle: **fixed**

2. Start engine and allow it to warm up in low speed for a few minutes.
3. Turn idle adjusting screw (T) counterclockwise so that saw chain does not turn. If idling speed is too slow, turn the screw clockwise.
4. Make a test cut adjust the H needle for best cutting power, not for maximum speed.

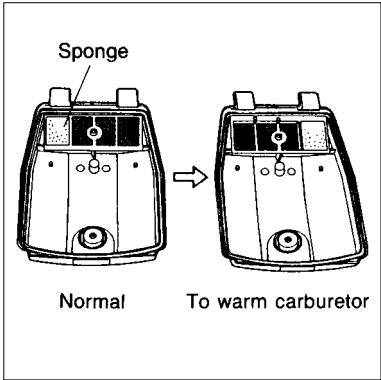
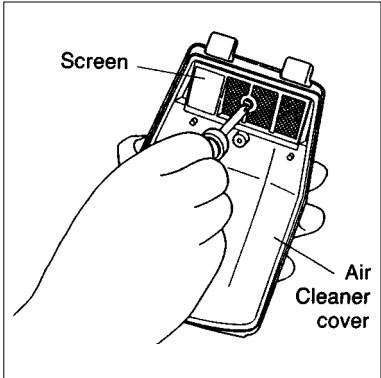
Icing prevention system

This system prevents icing of the carburetor which sometimes happen while sawing in winter. When your saw is possible to be frozen at the carburetor during operation, use the system as follows:

1. Loosen a screw and remove the screen on the back of the air cleaner cover.
2. Turn the screen a half and reinstall to the cover.

⚠ Never use the system in normal temperature because that can cause starting failure due to overheating of the carburetor.

When using the saw with the anti-icing setting, frequently check the screen and keep it clean of saw dust.

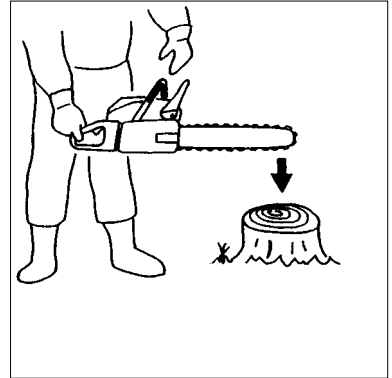


Chain brake

This machine is equipped with an automatic brake to stop saw chain rotation upon occurrence of kickback while in saw cutting operation. The brake is automatically operated by inertial force which acts on the weight fitted inside the front guard.

This brake can also be operated manually with the front guard turned down to the guide bar.

To release brake, pull up the front guard toward the front handle till “click” sound is heard.



[Caution]

Be sure to confirm brake operation on the daily inspection.

How to confirm:

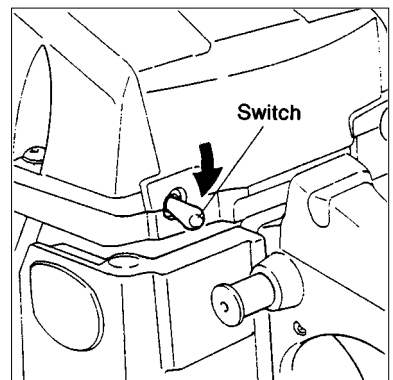
- 1) Turn off the engine.
- 2) Holding the chain saw horizontally, release your hand from the front handle, hit the tip of the guide bar to a stump or a piece of wood, and confirm brake operation. Operating level varies by bar size.

In case the brake is not effective, ask our dealer inspection and repairing.

The engine, if being kept rotated at high speed with the brake engaged, heats the clutch, causing a trouble. When the brake is operated while in operation, immediately release your fingers from the throttle lever and stop the engine.

Stopping engine

1. Release the throttle lever to allow the engine idling for a few minutes.
2. Move the switch lever downward.



5. Sawing

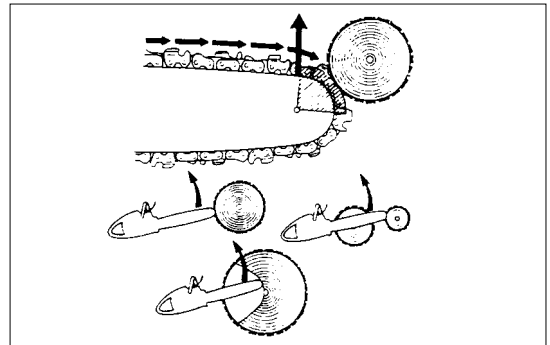
NOTE:

- Before proceeding to your job, read “For Safe Operation” section. It is recommended to first practice sawing easy logs. This also helps you get accustomed to your unit.
- It is not necessary to force the saw into the cut. Apply only light pressure while running the engine at full throttle.
- Racing the engine with the chain seized in a cutaway can damage the clutch system. When the saw chain is caught in the cut, do not attempt to pull it out by force, but use a wedge or a lever to open the cut.

■ GUARD AGAINST KICKBACK

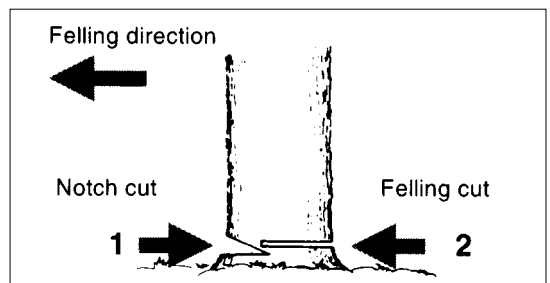
- This saw is equipped with a special “low kickback” chain that greatly reduces the severity of kickback should it occur.
- The saw chain has been tested in accordance with American National Standard Safety Specifications for gasoline powered chain saw (ANSI B175.1 1985) as having an acceptable low kickback level. On this saw never use any chain other than those recommended on page 12 of this manual, or which is not designated as meeting the ANSI B175.1 kickback levels on this saw.
- Low kickback saw chains are chains which have met the kickback requirements of ANSI B175.1 when tested on the representative samples of chain saws below 3.8 C.I.D. specified in ANSI B175.1.
- The guide bar supplied with this saw has an under 1.2 inch radius sprocket nose which produces a specific kickback energy. Never use a bar with a larger nose radius. Use only those recommended on page 12.
- The length of bars has a great effect on kickback. Use only those length as specified on page 12.

- This saw is also equipped with a chain brake that will stop the chain in the event of kickback if operating properly. You must check the chain brake operation before each usage by running the saw at full throttle for 1 or 2 seconds and pushing the front hand guard forward. The chain should stop immediately with the engine at full speed. If the chain is slow to stop or does not stop then replace the brake band and clutch drum before use.
- It is extremely important that the chain brake be checked for proper operation before each use and that the chain be sharp in order to maintain the kickback safety level of this saw. Removal of the safety devices, inadequate maintenance, or incorrect replacement of the bar or chain may increase the risk of serious personal injury due to kickback.



■ FELLING A TREE

[CAUTION!] When you fell a tree, be sure to warn your neighboring workers of the danger.



1. Decide the felling direction considering the wind, lean of the tree, location of heavy branches, ease of job after felling, and other factors .
2. While clearing the area around the tree, arrange a good foothold and retreat path.
3. Make a notch cut one-third of the way into the tree on the felling side.
4. Make a felling cut from the opposite side of the notch and at a level slightly higher than the bottom of the notch.

■ LOGGING AND LIMBING

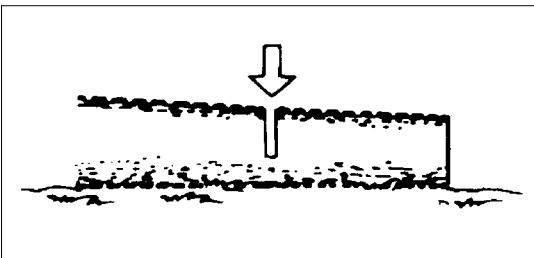
[CAUTION!]

1. Always ensure your foothold as well as stability of the tree.
2. Be alert to the rolling over of a cut log.
3. Read the instructions in “For Safe Operation” to avoid kickback of the saw.

Before starting work, check the direction of bending force inside the log to be cut. Always finish cutting from the opposite side of bending direction to prevent the guide bar from being caught in the cutaway.

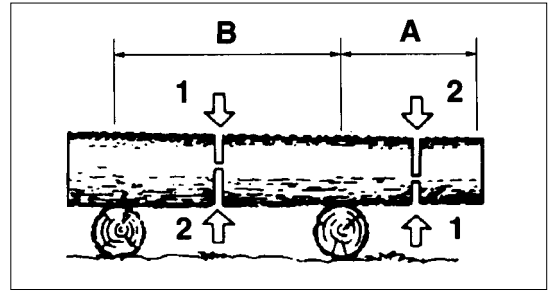
• Cutting an unpillowed log

Saw down halfway, then roll the log over and cut from the opposite side.



• Cutting a pillowed log

In the area A in the picture right above, saw up from the bottom one-third and finish by sawing down from the top. In the area B, saw down from the top one-third and finish by sawing up from the bottom.

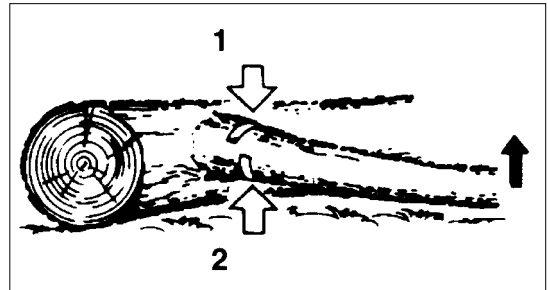


• Limbing a felled tree

[CAUTION!]

Be alert to the spring back of a cut limb.

First check which way the limb is bent. Then make a shallow cut into the compressed side to prevent the limb from being torn. Cut through from the tensed side.

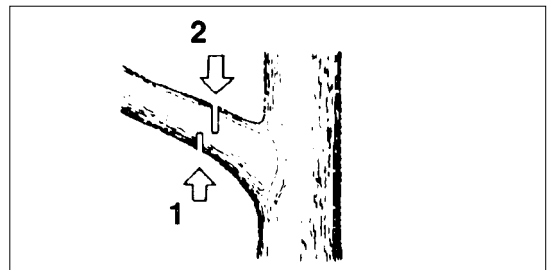


• Pruning

[CAUTION!]

1. Do not use an unstable foothold or a stepladder.
2. Do not overreach.
3. Do not cut above shoulder height.
4. Always use both hands to grip the saw.

Cut up from the bottom, finish down from the top.



6. Maintenance

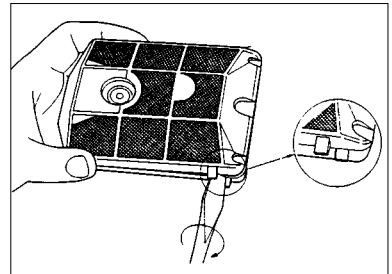
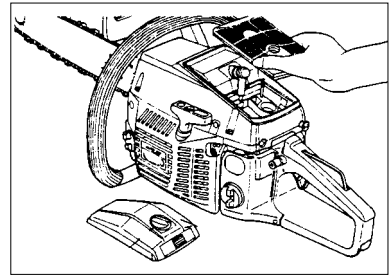
⚠ Before cleaning, inspecting or repairing your unit, make sure that engine has stopped and is cool. Disconnect the spark plug to prevent accidental starting.

A. Maintenance after each use

1. Air filter

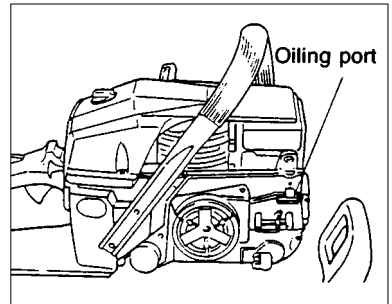
Dust on the cleaner surface can be removed by tapping a corner of the cleaner against a hard surface. To clean dirt in the meshes, split the cleaner into halves and brush in gasoline. When using compressed air, blow from the inside.

To assemble the cleaner halves, press the rim until it clicks.



2. Oiling port

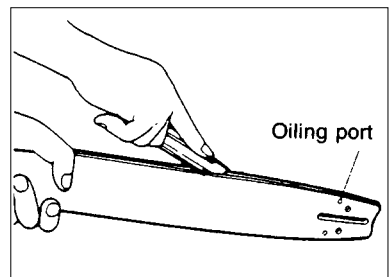
Dismount the guide bar and check the oiling port for clogging.



3. Guide bar

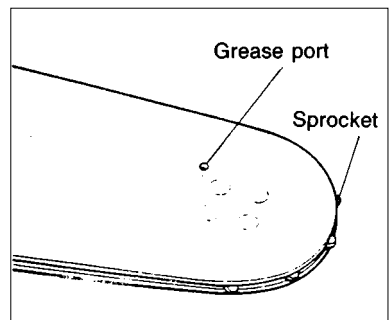
When the guide bar is dismounted, remove sawdust in the bar groove and the oiling port.

Grease the nose sprocket from the feeding port on the tip of the bar.



4. Others

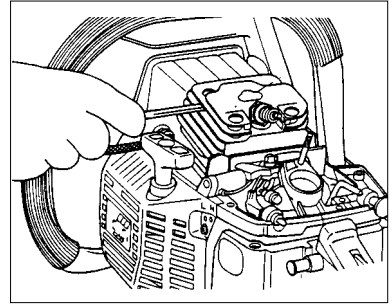
Check for fuel leakage and loose fastenings and damage to major parts, especially handle joints and guide bar mounting. If any defects are found, make sure to have them repaired before operating again.



B. Periodical service points

1. Cylinder fins

Dust clogging between the cylinder fins will cause overheating of the engine. Periodically check and clean the cylinder fins after removing the air cleaner and the cylinder cover. When installing the cylinder cover, make sure that switch wires and grommets are positioned correctly in place.

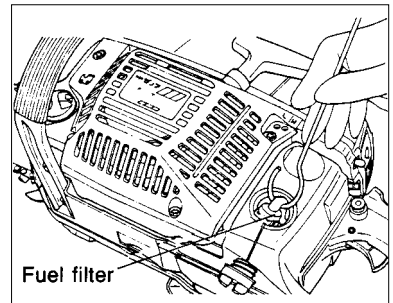


2. Fuel filter

- (1) Using a wire hook, take out the filter from the filler port.
- (2) Disassemble the filter and wash with gasoline, or replace with a new one if needed.

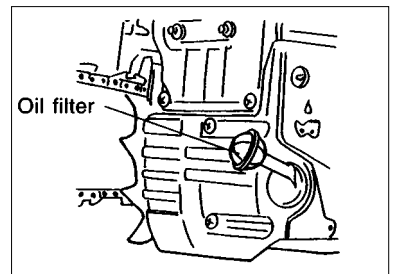
Note:

- After removing the filter, use a pinch to hold the end of the suction pipe.
- When assembling the filter, take care not to allow filter fibers or dust inside the suction pipe.



3. Oil tank

With a wire hook, take out the oil filter through the filler port and clean in gasoline. When putting the filter back into the tank, make sure that it comes to the front right corner. Also clean off dirt in the tank.

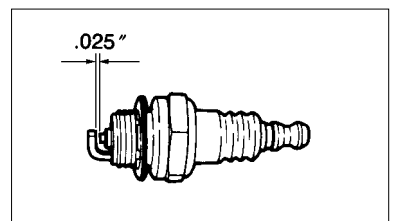


4. Spark plug

Clean the electrodes with a wire brush and reset the gap to .025 in. as necessary.

Note:

Use a Champion RCJ-7Y or NGK BPMR7A for replacement.



5. Sprocket


Check for cracks and for excessive wear interfering with the chain drive. If the wearing is found obviously, replace it with a new one. Never fit a new chain on a worn sprocket, or a worn chain on a new sprocket.

6. Front and Rear dampers

Replace if adhered part is peeled or crack is observed on the rubber part.


7. Maintenance of Saw Chain and Guide Bar

A. Saw Chain

 It is very important for smooth and safe operation to keep the cutters always sharp.

- Your cutters need to be sharpened when:**
- Sawdust becomes powder-like.
 - You need extra force to saw in.
 - The cut way does not go straight.
 - Vibration increases.
 - Fuel consumption increases.

Cutter setting standards:

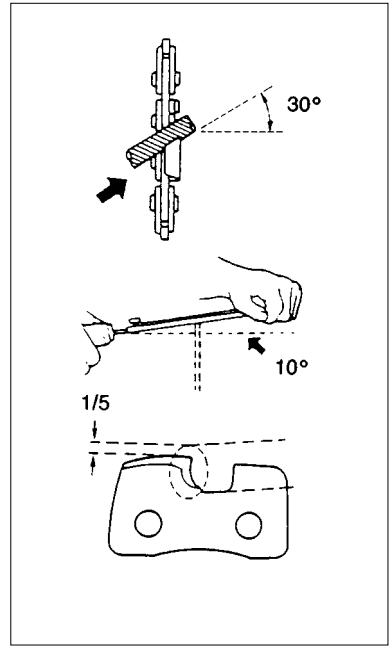
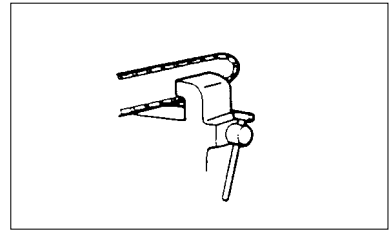
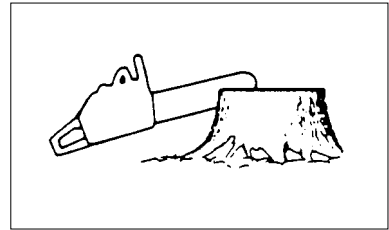
 Be sure to wear safety gloves.

Before filing:

- Make sure the saw chain is held securely.
- Make sure the engine is stopped.
- Use a round file of proper size for your chain.

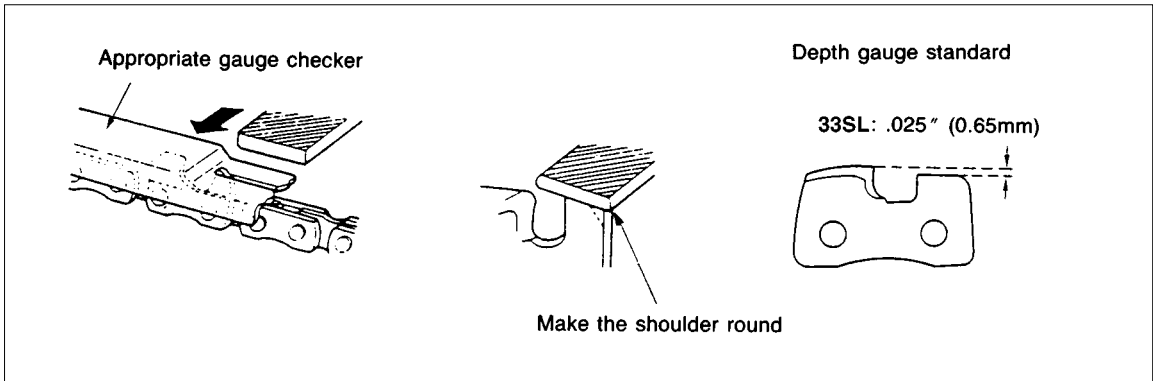
Chain type	33SL
File size	4.5mm

Place your file on the cutter and push straight forward.
Keep the file position as illustrated.

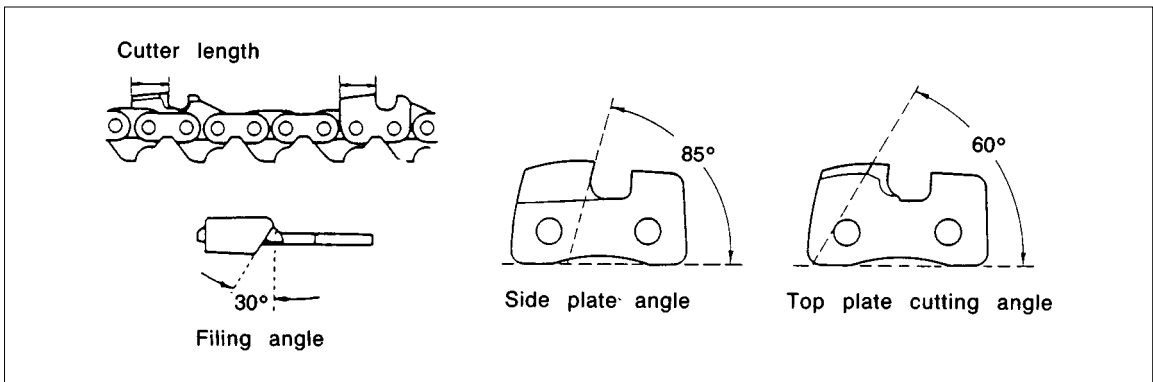


After every cutter has been set, check the depth gauge and file it to the proper level as illustrated.

⚠ Be sure to round off the front edge to reduce the chance of kickback or tie-strap breakage.

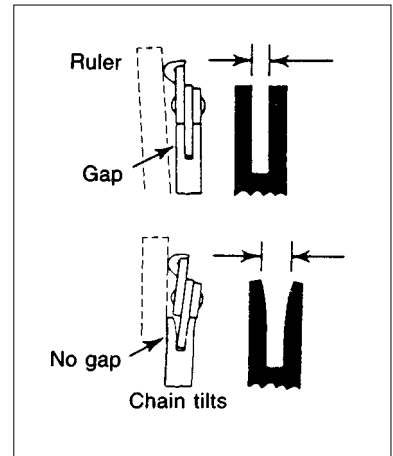


Make sure every cutter has the same length and edge angles as shown below.



B. Guide Bar

- Reverse the bar occasionally to prevent partial wear.
- The bar rail should always be a square. Check for wear of the bar rail. Apply a ruler to the bar and the outside of a cutter. If a gap is observed between them, the rail is normal. Otherwise, the bar rail is worn. Such a bar needs to be corrected or replaced.



WARNING:

This saw is equipped with the following low kickback bar/chain combination:

Saw Model	Bar Size	RedMax® Part Number	
		Guide Bar	Saw Chain
G455AVS	16"	G0021	33SL-66X

For replacement use only above bars and chains or the following:

OREGON BAR
16 inch DOUBLE GUARD™ Pro bar,
Mount code #A195.

OREGON CHAIN

G455AVS
33SL

8. Troubleshooting Guide

Case 1. Starting failure:

Check fuel for water or incorrect mixture.



Replace with proper fuel.



Check engine for flooding.



Remove and dry the spark plug.
Repeat pulling starter with no choke.



Remove spark plug and check for correct sparking.



Replace with a new plug.

Case 2. Lack of power/Poor acceleration/Rough idling:

Check fuel for water or incorrect mixture.



Replace with proper fuel.



Check air filter and fuel filter for clogging.



Clean or replace as necessary.



Check carburetor for inadequate adjustment.



Readjust speed needles. (See page 8.)

Case 3. Oil does not come out:

Check oil tank to see if empty.



Supply oil.



Check oil passage and ports for clogging.



Clean.

When your unit seems to need further service, please consult our service shop in your area.

9. Specifications

Model		G455AVS
Power unit:		
Dis placement	cc (cu. in.)	45.0 (2. 75)
Fuel		Mixture (Gasoline 32: Two-cycle oil 1)
Fuel tank capacity	cc (pints)	550 (1.17)
Chain oil		Motor oil SAE#10W-30
Oil tank capacity	cc (pints)	260 (0.55)
Carburetor		Diaphragm type (Walbro WT)
Ignition system		C.D.I. with timing advance function
Spark plug		Champion RCJ-7Y
Oil feeding system		Mechanical plunger pump with adjuster
Sprocket Teeth x Pitch		7T x .325"
Dimensions (L x W x H)	mm (in.)	410 x 235 x 265 (16.1 x 9.3 x 10.4)
Dry weight : Power unit only	kg (lbs)	4.85 (10.7)
Cutting head:		
Guide bar	– Type	Sprocket nose
	– Size in.	16
Saw chain	– Type	Oregon 33SL
	– Pitch in.	.325
	– Gauge in.	.050

Specifications are subject to change without notice.

10. Parts List

CHAINSAWS

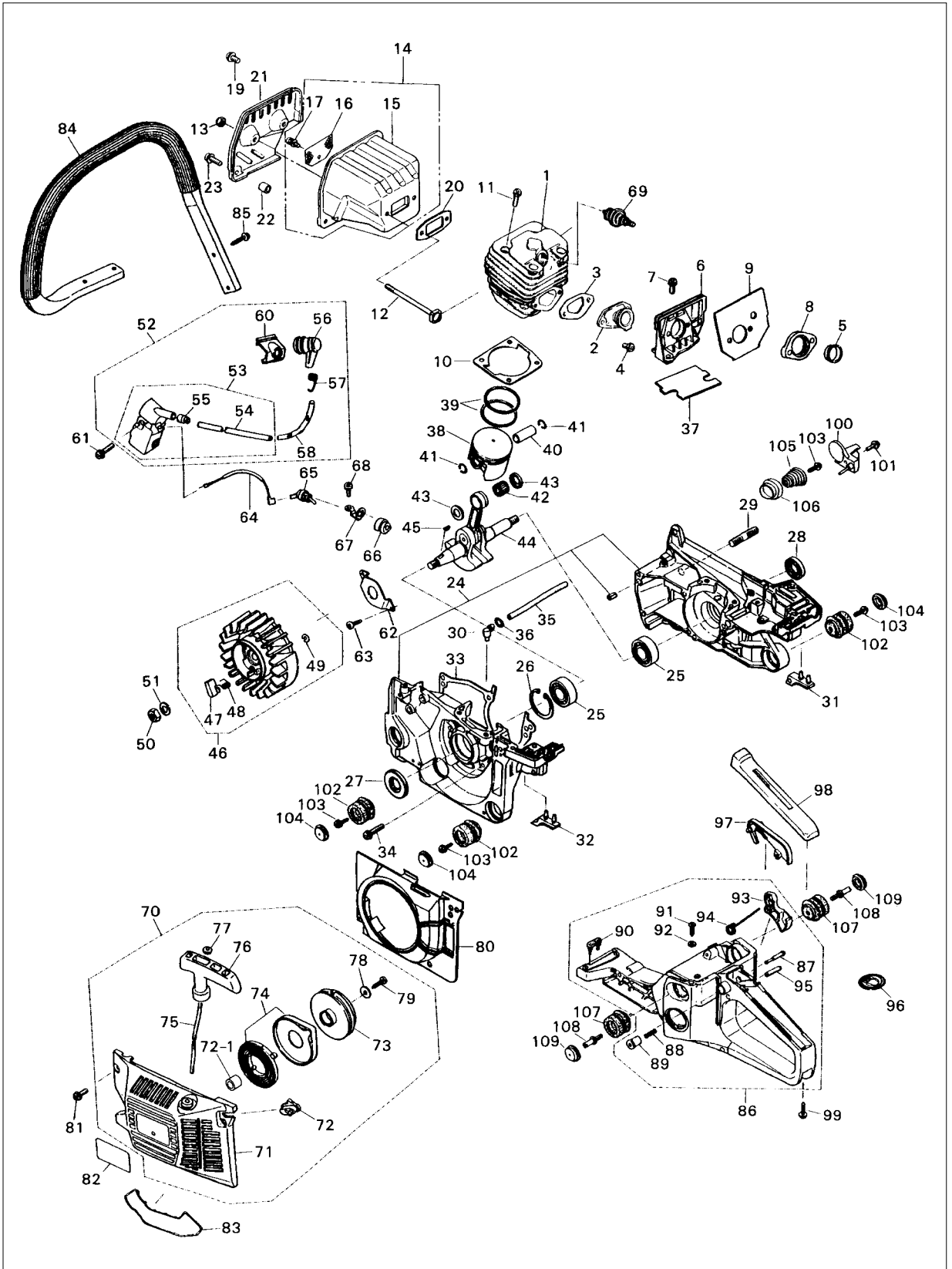
G455AVS

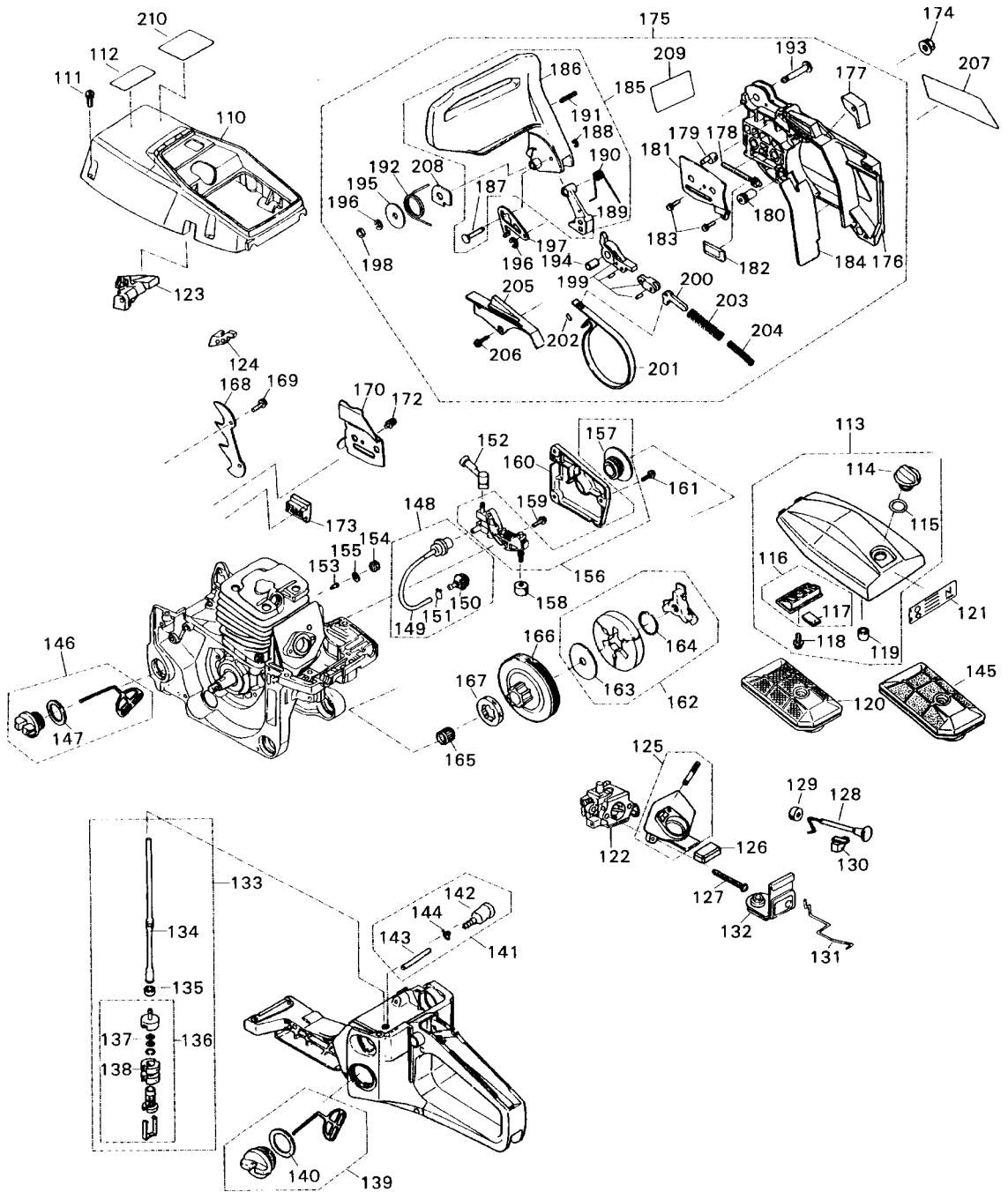
NOTE :

1. Use KOMATSU ZENOAH genuine parts as specified in the parts list for repair and/or replacement.
2. KOMATSU ZENOAH does not warrant the machines, which have been damaged by the use of any parts other than those specified by the company.
3. When placing parts orders for repair and/or replacement, check if the model name and the serial number are applicable to those specified in the parts list, then use parts number described in the parts list.
4. The contents described in the parts list may change due to improvement.
5. The parts for the machine shall be supplied seven (7) years after the machine is discontinued. [It is possible that some specific parts may be subject to change of their delivery term and list price within the limit of ten (7) years after the machine is discontinued. It is also possible that some parts may be available even after the limit of seven (7) years.]

APPLICABLE SERIAL NUMBER : 918747 and up

10. Parts List : G455AVS



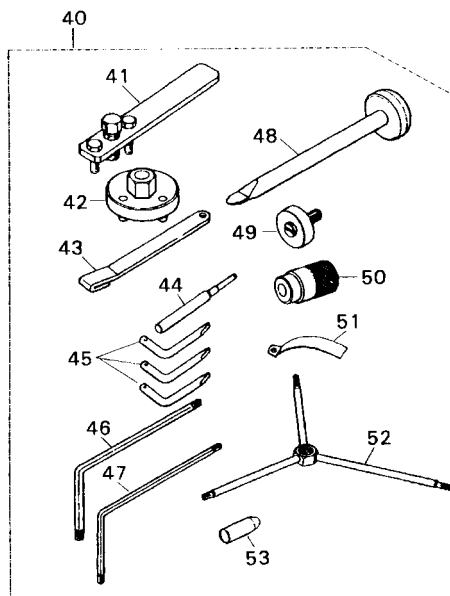
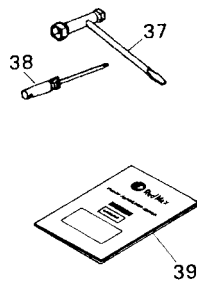
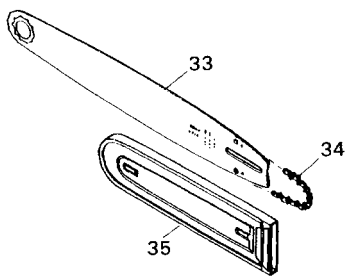
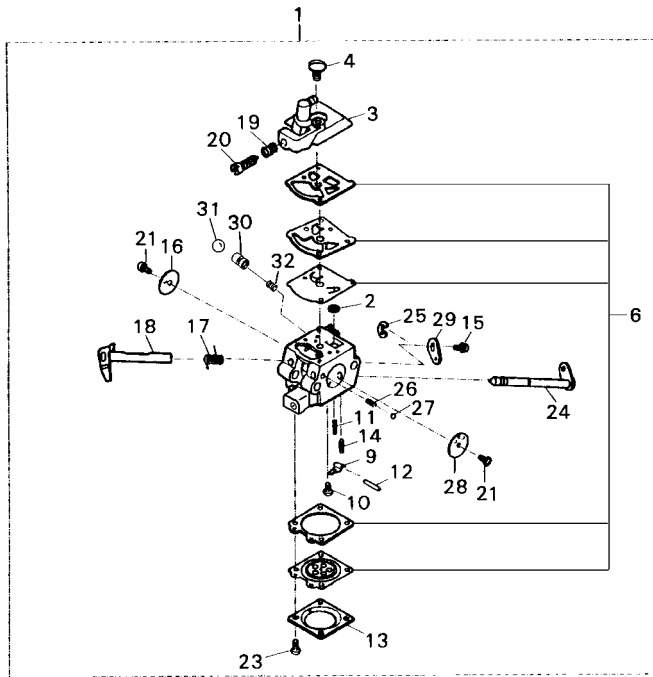


10. Parts List : G455AVS

Key#	Part Number	Description	Q'ty	NOTE	Key#	Part Number	Description	Q'ty	NOTE
1	2670-12112	CYLINDER	1		55	2670-71230	GROMMET	1	
2	2810-14110	INLET PIPE	1		56	2810-72110	CAP	1	
3	2817-14121	GASKET	1	*1	57	1400-72121	SPRING	1	
4	2670-14130	SCREW	2		58	2670-71320	TUBE	1	
5	2880-14150	GUIDE	1		59	_____	_____	—	
6	2670-14311	BRACKET	1		60	2810-71250	GROMMET	1	
7	2670-14320	SCREW	2		61	2670-14220	SCREW	2	
8	2880-14350	SPACER	1		62	2810-21270	PLATE	1	
9	2880-14360	GASKET	1		63	0260-30410	SCREW	2	
10	2670-14211	GASKET	1	*1	64	2670-71510	CORD	1	
11	2850-14220	BOLT	4		65	2810-71610	SWITCH	1	
12	2810-15220	BOLT	2		66	2670-71621	COVER	1	
13	2850-15230	NUT	2		67	2880-71630	PLATE	1	
14	2812-15103	MUFFLER ASS'Y	1		68	2670-14130	SCREW	1	
15	2812-15113	MUFFLER	1		69	1630-73110	SPARK PLUG	1	*1
16	3357-15120	SPARK ARRESTER	1			Champiopn RCJ7Y			
17	2670-25430	SCREW	1		70	2880-75003	STARTER ASS'Y	1	
18	_____	_____	—		71	2810-75110	CASE	1	
19	2670-14130	SCREW	1		72	2810-75120	GUIDE	1	
20	3356-15210	GASKET	1	*1	72-1	2810-75150	BOSS	1	
21	2812-15310	COVER	1		73	2670-75212	REEL	1	
22	2672-15320	SPACER	1		74	3317-75300	SPRING COMP.	1	
23	2670-14220	SCREW	1		75	2670-75411	ROPE	1	
24	2812-21000	CRANKCASE ASS'Y	1		76	1400-75170	KNOB	1	
25	2810-21240	BEARING	2		77	3310-75431	WASHER	1	
26	04065-03515	SNAP RING	1		78	1400-86280	WASHER	1	
27	2670-21210	SEAL	1		79	2670-14220	SCREW	1	
28	2670-21220	SEAL	1		80	2880-75600	COVER COMP.	1	
29	2616-21230	STUD	2		81	2670-14320	SCREW	4	
30	2670-21250	ELBOW	1		82	2812-75130	LABEL	1	
31	2810-22511	STOPPER	1		83	2881-98611	SNOW PROTECTOR	1	*2 Optional
32	2810-22521	STOPPER	1		84	2810-32100	LEFT HANDLE COMP.	1	
33	2670-21311	GASKET	1	*1	85	2671-32210	SCREW	4	
34	2670-21320	SCREW	5		86	2810-33007	HANDLE ASS'Y	1	
35	2810-22210	PIPE	1		87	3330-33250	STOPPER	1	
36	3310-82230	CLIP	1		88	3310-33262	SPRING	1	
37	2810-22411	MAT	1		89	3310-33271	KNOB	1	
38	2670-41113	PISTON	1		90	2810-33280	DAMPER (A)	1	
39	2670-41211	RING	2		91	2670-75520	SCREW	1	
40	3350-41310	PIN	1		92	2810-33210	GASKET	1	
41	3350-41320	SNAP RING	2		93	2670-33311	LEVER	1	
42	1400-41410	BEARING	1		94	3356-33321	SPRING	1	
43	2670-41510	WASHER	2		95	04025-00524	SPRING PIN	1	
44	2880-42001	CRANKSHAFT COMP.	1		96	3356-31160	LABEL	1	
45	1000-43240	KEY	1		97	3356-83351	ARM	1	
46	2670-71101	ROTOR ASS'Y	1		98	2670-34110	COVER	1	
47	1850-75220	RATCHET	2		99	2671-32210	SCREW	1	
48	2670-71130	SPRING	2		100	2810-25210	CHAIN CATCHER	1	
49	0308-00040	RNG	2		101	2670-14320	SCREW	1	
50	3350-43231	NUT	1		102	2880-35111	DAMPER	3	
51	0290-20820	WASHER	1		103	2670-35120	SCREW	4	
52	2880-71300	COIL ASS'Y	1		104	2810-35150	CAP	3	
53	2810-71204	COIL COMP.	1		105	2881-35110	SPRING	1	
54	2810-71220	CORD	1		106	2881-35120	SPACER	1	

Key#	Part Number	Description	Q'ty	NOTE	Key#	Part Number	Description	Q'ty	NOTE
107	2880-35211	DAMPER	2		161	2670-55410	SCREW	3	
108	3350-35170	BOLT	2		162	2670-51200	CLUTCH ASS'Y	1	
109	2880-35250	CAP	2		163	2670-51210	PLATE	1	
110	2810-31115	CYLINDER COVER	1		164	3317-51231	SPRING	1	
111	2670-14320	SCREW	5		165	2810-51310	BEARING	1	
112	3359-83340	LABEL	1		166	2880-51110	DRUM	1	
113	2810-83305	CLEANER COVER COMP.	1		167	3350-51121	RIM	1	
114	3356-83322	KNOB	1		168	2670-25310	SPIKE	1	
115	3388-83340	GASKET	1		169	2670-14320	SCREW	2	
116	2810-83500	CLEANER COMP.	1		170	2810-25421	PLATE	1	
117	2810-83520	SEAL	1		171	_____	_____	—	
118	1600-33130	SCREW	1		172	2670-25430	SCREW	1	
119	2810-83410	GROMMET	1		173	2670-25410	GUIDE	1	
120	2810-83101	CLEANER COMP.	1		174	3350-53410	NUT	2	
121	2813-31210	LABEL	1		175	2812-54004	CHAIN COVER ASS'Y	1	
122	2812-81000	CARBURETOR ASS'Y	1		176	2671-53114	COVER	1	
123	2880-82310	GUIDE (I)	1		177	2880-53150	STOPPER	1	
124	2880-82350	GUIDE (HL)	1		178	2671-53210	SCREW	1	
125	2880-82102	MANIFOLD COMP.	1		179	2810-53221	NUT	1	
126	2810-82141	SUPPORTER	1		180	2671-53230	GEAR	1	
127	2880-82210	SCREW	2		181	2671-53240	PLATE	1	
128	2880-82410	CHOKE ROD	1		182	2670-25410	GUIDE	1	
129	2670-82421	GROMMET	1		183	2670-54630	SCREW	2	
130	2670-82430	GUIDE	1		184	2671-53311	PROTECTOR	1	
131	2880-82511	THROTTLE ROD	1		185	2812-54101	GUARD COMP.	1	
132	2810-82520	GROMMET	1		186	2812-54111	GUARD	1	
133	2810-34303	FUEL PIPE ASS'Y	1		187	2670-54121	PIN	1	
134	2810-34312	PIPE	1		188	0308-00030	RING	1	
135	2810-34350	COLLAR	1		189	2880-54130	WEIGHT	1	
136	3302-85400	FILTER ASS'Y	1		190	2880-54140	SPRING	1	
137	3302-85420	SCREEN	2		191	2880-54150	PIN	1	
138	3306-85450	FILTER	2		192	2670-54210	SPRING	1	
139	2670-34401	TANK CAP ASS'Y	1		193	2670-54220	PIN	1	
140	2670-34430	GASKET	1		194	2670-54231	SPACER	1	
141	2670-34500	BREATHER ASS'Y	1		195	3238-15230	WASHER	1	
142	2670-34510	BREATHER	1		196	0308-00040	RING	2	
143	3350-34540	PIPE	1		197	2810-54240	PLATE	1	
144	1260-85460	CLIP	1		198	2810-54260	SPACER	1	
145	2811-98501	CLEANER COMP.	1	*3 Optional	199	2670-54302	BRAKE LEVER COMP.	1	
146	2630-31801	CAP ASS'Y	1		200	2670-54410	ARM	1	
147	2630-31820	GASKET	1		201	2670-54510	BAND	1	
148	2812-23100	OIL PIPE ASS'Y	1		202	3356-24140	ROLLER	1	
149	2812-23120	PIPE	1		203	2670-54610	SPRING	1	
150	2812-23130	FILTER	1		204	2880-54650	SPRING	1	
151	1260-85460	CLIP	1		205	2670-54621	COVER	1	
152	2670-23210	PIPE	1		206	2670-54630	SCREW	3	
153	3330-23121	VALVE	1		207	2672-53120	LABEL	1	
154	3350-26220	SEAL	1		208	2672-54250	GASKET	1	
155	3350-26230	CLIP	1		209	2812-31320	LABEL	1	
156	2880-55100	OIL PUMP ASS'Y	1		210	2812-31410	LABEL	1	
157	2670-55120	GEAR	1						
158	2670-55220	SEAL	1						
159	2670-55410	SCREW	2						
160	2670-55610	COVER	1						

10. Parts List : G455AVS



Key#	Part Number	Description	Q'ty	NOTE	Key#	Part Number	Description	Q'ty	NOTE
1	2812-81000	CARBURETOR ASS'Y	—						
2	3306-81380	SCREEN	1						
3	2810-81120	COVER	1						
4	3310-81130	SCREW	1						
5	—	—	—						
6	2812-06020	GASKET KIT	1						
7	—	—	—						
8	—	—	—						
9	3310-81230	LEVER	1						
10	3310-81240	SCREW	1						
11	2841-81270	SPRING	1						
12	3310-81250	PIN	1						
13	3310-81280	COVER	1						
14	3356-81310	INLET VALVE	1						
15	3310-81360	SCREW	1						
16	3356-81340	THROTTLE VALVE	1						
17	2670-81410	SPRING	1						
18	2812-81420	THROTTLE SHAFT	1						
19	2630-81460	SPRING	1						
20	2670-81430	SCREW	1						
21	2880-81470	SCREW	2						
22	—	—	—						
23	3310-81351	SCREW	4						
24	2880-81460	CHOKE SHAFT	1						
25	1148-81390	RING	1						
26	3350-81350	SPRING	1						
27	3350-81220	BALL	1						
28	2670-81450	CHOKE VALVE	1						
29	2810-81440	LEVER	1						
30	2812-81510	PISTON	1						
31	2812-81520	BALL	1						
32	2810-81530	SPRING	1						
33	G0021	BAR 16	1						
34	33SL-66X	CHAIN 33SL-66E	1						
35	3359-97110	PROTECTOR	1						
36	—	—	—						
37	3320-91140	WRENCH	1						
38	2670-91150	SCREWDRIVER	1						
39	2812-93112	OWNER'S MANUAL	1						
40	2670-96002	TOOL SET	1	*1					
41	2890-96100	PULLER ASS'Y	1	*1					
42	2670-96210	WRENCH	1	*1					
43	2670-96220	STOPPER	1	*1					
44	3350-96230	GUIDE	1	*1					
45	2670-96240	WRENCH	3	*1					
46	2670-96310	WRENCH	1	*1					
47	2670-96320	WRENCH	1	*1					
48	2670-96510	GUIDE	1	*1					
49	3350-96620	GUIDE	1	*1					
50	2670-96660	HOLDER	1	*1					
51	3350-96240	GAUGE	1	*1					
52	2670-96410	WRENCH	1	*1					
53	2810-96710	GUIDE	1	*1					

*1 Special tools (Opt. Part)

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

THE CALIFORNIA AIR RESOURCES BOARD AND KOMATSU ZENOAH Co. ARE PLEASED TO EXPLAIN THE **EMISSION CONTROL SYSTEM WARRANTY** ON YOUR **1995 AND LATER** LAWN AND GARDEN EQUIPMENT ENGINE. IN CALIFORNIA, NEW UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES MUST BE DESIGNED, BUILT AND EQUIPPED TO MEET THE STATE'S STRINGENT ANTI-SMOG STANDARDS.

KOMATSU ZENOAH Co, MUST WARRANT THE EMISSION CONTROL SYSTEM ON YOUR LAWN AND GARDEN EQUIPMENT ENGINE FOR THE PERIODS OF TIME LISTED BELOW PROVIDED THERE HAS BEEN NO ABUSE, NEGLIGENCE OR IMPROPER MAINTENANCE OF YOUR LAWN AND GARDEN EQUIPMENT ENGINE.

YOUR EMISSION CONTROL SYSTEM. MAY INCLUDE PARTS SUCH AS THE CARBURETOR, THE IGNITION SYSTEM, AND CATALYTIC CONVERTER. ALSO INCLUDED MAY BE THE HOSES, BELTS, CONNECTORS AND OTHER EMISSION-RELATED ASSEMBLIES.

WHERE A WARRANTABLE CONDITION EXISTS, KOMATSU ZENOAH Co. WILL REPAIR YOUR LAWN AND GARDEN EQUIPMENT ENGINE AT NO COST TO YOU INCLUDING DIAGNOSIS, PARTS AND LABOR.

MANUFACTURER'S WARRANTY COVERAGE:

THE 1995 AND LATER UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES ARE WARRANTED FOR **TWO YEARS**. IF ANY EMISSION-RELATED PART ON YOUR ENGINE IS DEFECTIVE, THE PART WILL BE REPAIRED OR REPLACED BY KOMATSU ZENOAH Co.

OWNER'S WARRANTY RESPONSIBILITIES:

—AS THE LAWN AND GARDEN EQUIPMENT ENGINE OWNER, YOU ARE RESPONSIBLE FOR THE PERFORMANCE OF THE **REQUIRED MAINTENANCE LISTED IN YOUR OWNER'S MANUAL**. KOMATSU ZENOAH Co. RECOMMENDS THAT YOU RETAIN ALL RECEIPTS COVERING MAINTENANCE ON YOUR LAWN AND GARDEN ENGINE, BUT KOMATSU ZENOAH Co. CAN NOT DENY WARRANTY SOLELY FOR THE LACK OF RECEIPTS OR FOR YOUR FAILURE TO ENSURE THE PERFORMANCE OF ALL SCHEDULED MAINTENANCE.

—AS THE LAWN AND GARDEN EQUIPMENT ENGINE OWNER, YOU SHOULD BE AWARE, HOWEVER, THAT KOMATSU ZENOAH Co. MAY DENY YOU WARRANTY COVERAGE IF YOUR LAWN AND GARDEN EQUIPMENT ENGINE OR A PART HAS FAILED DUE TO ABUSE, NEGLIGENCE, IMPROPER MAINTENANCE OR UNAPPROVED MODIFICATION.

—YOU ARE RESPONSIBLE FOR PRESENTING YOUR LAWN AND GARDEN EQUIPMENT ENGINE TO A KOMATSU ZENOAH Co. DISTRIBUTION CENTER AS SOON AS A PROBLEM EXISTS. THE WARRANTY REPAIRS SHOULD BE COMPLETED IN A REASONABLE AMOUNT OF TIME, NOT TO EXCEED **30 DAYS**.

IF YOU HAVE ANY QUESTIONS REGARDING YOU WARRANTY RIGHTS AND RESPONSIBILITIES, YOU SHOULD CONTACT KOMATSU ZENOAH AMERICA INC. AT (770)-381-5147.

**RedMax CHAIN SAW
MODELS G455AVS
1-YEAR LIMITED WARRANTY**

EMISSION-RELATED PARTS, FOR TWO (2) YEARS FROM THE DATE OF ORIGINAL DELIVERY OF THE MODEL G455AVS UNIT, KOMATSU ZENOAH AMERICA INC. (THE COMPANY), THROUGH ANY RedMax DEALER, WILL REPAIR OR REPLACE, FREE OF CHARGE, FOR THE ORIGINAL AND EACH SUBSEQUENT PURCHASER. ANY PART OR PARTS FOUND TO BE DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP. EMISSION-RELATED PARTS ARE:

**THE CARBURETOR ASSY, COIL ASSY, ROTOR, SPARK PLUG,
AIR FILTER, FUEL FILTER, INTAKE MANIFOLD, AND THE GASKETS**

ALL OTHER PARTS EXCEPT ABOVE PARTS, FOR ONE (1) YEAR OF HOME USE [NINETY (90) DAYS FOR ANY OTHER USE] FROM THE DATE OF ORIGINAL ANY DELIVERY OF THE MODEL G455AVS UNIT. THE COMPANY, THROUGH ANY RedMax DEALER, WILL REPAIR OR REPLACE, FREE OF CHARGE, FOR THE ORIGINAL PURCHASER, ANY PART OR PARTS FOUND TO BE DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP. **THIS IS THE EXCLUSIVE REMEDY.**

THE PURCHASER SHALL BEAR COSTS OF TRANSPORTING THE UNIT TO AND FROM THE RedMax DEALER.

THE PURCHASER SHALL NOT BE CHARGED FOR DIAGNOSTIC LABOR WHICH LEADS TO THE DETERMINATION THAT A WARRANTED PART IS DEFECTIVE, IF THE DIAGNOSTIC WORK IS PERFORMED AT THE RedMax DEALER.

THE PURCHASER OR OWNER IS RESPONSIBLE FOR THE PERFORMANCE OF THE REQUIRED MAINTENANCE AS DEFINED BY THE MANUFACTURER IN THE OWNER/OPERATOR MANUAL.

ANY WARRANTED PART WHICH IS NOT SCHEDULED FOR REPLACEMENT AS REQUIRED MAINTENANCE, OR WHICH IS SCHEDULED ONLY FOR REGULAR INSPECTION TO THE EFFECT OF "REPAIR OR REPLACE AS NECESSARY" SHALL BE WARRANTED FOR THE WARRANTY PERIOD. ANY WARRANTED PART WHICH IS SCHEDULED FOR REPLACEMENT AS REQUIRED MAINTENANCE SHALL BE WARRANTED FOR THE PERIOD OF TIME UP TO THE FIRST SCHEDULED REPLACEMENT POINT FOR THAT PART.

ANY REPLACEMENT PART THAT IS EQUIVALENT IN PERFORMANCE AND DURABILITY MAY BE USED IN NON-WARRANTY MAINTENANCE OR REPAIRS, AND SHALL NOT REDUCE THE WARRANTY OBLIGATION OF THE COMPANY.

THE COMPANY IS LIABLE FOR DAMAGES TO OTHER ENGINE COMPONENTS CAUSED BY THE FAILURE OF A WARRANTED PARTS STILL UNDER WARRANTY.

THIS WARRANTY DOES NOT APPLY TO THOSE UNITS WHICH HAVE BEEN DAMAGED BY NEGLIGENCE OF INSTRUCTION LISTED IN THE OWNER/OPERATOR MANUAL FOR PROPER USE AND MAINTENANCE OF THE UNITS, ACCIDENT MISHANDLING, ALTERATION, ABUSE, IMPROPER LUBRICATION, USE OF ANY PARTS OR ACCESSORIES OTHER THAN THOSE SPECIFIED BY THE COMPANY, OR OTHER CAUSES BEYOND THE COMPANY'S CONTROL.

THIS WARRANTY DOES NOT COVER THOSE PARTS REPLACED BY NORMAL WEAR OR HARMLESS CHANGES IN THEIR APPEARANCE.

THERE ARE NO OTHER EXPRESS WARRANTIES.

IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE **ARE LIMITED TO ONE (1) YEAR OF HOME USE [NINETY (90) DAYS FOR ANY OTHER USE] FROM THE ORIGINAL DELIVERY DATE.**

LIABILITIES FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE UNDER ANY AND ALL WARRANTIES ARE EXCLUDED.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

IF YOU NEED TO OBTAIN INFORMATION ABOUT THE NEAREST SERVICE CENTER, PLEASE CALL KOMATSU ZENOAH AMERICA INC. AT (770)-381-5147.

IMPORTANT: YOU WILL RECEIVE A WARRANTY REGISTRATION CARD AT TIME OF PURCHASE. PLEASE FILL OUT THE CARD AND SEND IT TO RedMax / KOMATSU ZENOAH AMERICA WITHIN SEVEN (7) DAYS. BE SURE TO KEEP A COPY FOR YOUR RECORDS.

 **RedMax**® KOMATSU ZENOAH AMERICA INC.
1505 Pavilion Place Suite A
Norcross, Georgia 30093



KOMATSU ZENOAH AMERICA INC.
1505 Pavilion Place Suite A
Norcross, Georgia 30093

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